

...JUNE 2011 REGIONAL CLIMATE SUMMARY...

AND

...2010-2011 RAIN YEAR SUMMARY...

SUMMARY FOR THE SAN FRANCISCO BAY AREA AND MONTEREY BAY AREA...

...A RECORD WET JUNE...

JUNE 2011 WAS COOLER AND WETTER THAN NORMAL. IN FACT...JUNE 2011 WAS THE WETTEST ON RECORD AT NUMEROUS CLIMATE STATIONS THROUGHOUT THE REGION. JUNE'S RAIN FELL EARLY IN THE MONTH AND ALSO DURING AN UNUSUAL EARLY SUMMER RAIN EVENT ON THE 28TH.

JUNE PRECIPITATION...

A COUPLE OF COOL LATE SPRING WEATHER SYSTEMS GOT JUNE OFF TO A WET START. THE FIRST SYSTEM DROPPED ONLY LIGHT AMOUNTS OF RAIN ON JUNE 1ST. A STRONGER SYSTEM SPINNING OFFSHORE A FEW DAYS LATER PRODUCED RECORD-SETTING DAILY RAINFALL AMOUNTS ON THE 4TH. MOST LOCATIONS PICKED UP BETWEEN 0.5 TO 1.5 INCHES ON THE FOURTH...AND AS MUCH AS 4 INCHES OF RAIN FELL IN THE SANTA LUCIA MOUNTAINS THAT DAY.

MOST OF THE REST OF JUNE WAS TYPICALLY DRY. THEN...LATE IN THE MONTH...A WEATHER SYSTEM DROPPING OUT OF THE GULF OF ALASKA TAPPED INTO A RICH MOISTURE SUPPLY AND PRODUCED UNSEASONABLY HEAVY RAINFALL ACROSS OUR AREA ON TUESDAY THE 28TH. ONCE AGAIN...DAILY RAINFALL RECORDS WERE BROKEN ACROSS THE REGION. 0.5 TO 1.0 INCH RAINFALL TOTALS WERE COMMON ACROSS THE SAN FRANCISCO BAY AREA. THE COLD FRONT WEAKENED CONSIDERABLE AS IT MOVED SOUTH INTO THE MONTEREY BAY AREA WHERE LESS THAN A HALF INCH OF RAIN FELL ON TUESDAY EVENING. RAIN EVENTS SUCH AS THE ONE ON THE 28TH ARE RARE IN OUR REGION DURING THE SUMMER SEASON...BUT CERTAINLY NOT UNPRECEDENTED. A SIMILAR WEATHER SYSTEM ON JULY 8 AND 9...1974 PRODUCED RAIN AMOUNTS MUCH LIKE THOSE OF JUNE 28 2011.

BECAUSE OF THE UNUSUALLY HEAVY RAIN EVENTS ON THE 4TH AND 28TH... JUNE 2011 WAS EITHER THE WETTEST ON RECORD OR ONE OF THE WETTEST ON RECORD AT NEARLY ALL CLIMATE STATIONS ACROSS THE REGION. JUNE 2011 RAINFALL BROKE PRECIPITATION RECORDS THAT HAD BEEN IN PLACE AS FAR BACK AS 1929 (IN LIVERMORE AND SANTA CRUZ) AND 1912 (REDWOOD CITY). SAN FRANCISCO...WHICH HAS ONE OF THE LONGEST CLIMATE RECORDS...HAD ITS SECOND WETTEST JUNE. THE JUNE PRECIPITATION RECORD THAT STILL STANDS FOR SAN FRANCISCO GOES ALL THE WAY BACK TO 1884.

JUNE 2011 WAS THE WETTEST JUNE ON RECORD AT THE FOLLOWING LOCATIONS:

LOCATION.....	JUNE 2011 RAIN.....	PREVIOUS RECORD.....	YEAR OF PREVIOUS RECORD
BEN LOMOND	3.25	2.20	1967
BIG SUR STATION	3.63	2.53	1934
CARMEL VALLEY	0.73	0.72	1967

CLOVERDALE	2.27	2.12	1967
CONCORD	2.21	1.14	1995
FREMONT	1.85	0.27	2000
HALF MOON BAY	2.11	1.44	1967
LIVERMORE	1.07	0.83	1929
MARTINEZ	2.52	1.37	1995
MONTEREY	1.56	1.56	1967
MT DIABLO JUNCTION	3.71	1.34	1995
MT HAMILTON	1.52	1.12	1995
MUIR WOODS	3.32	3.23	1967
NAPA	2.61	1.95	1967
OAKLAND	2.70	0.92	1995
PACIFICA	2.20	1.06	1992
REDWOOD CITY	1.04	1.01	1912
RICHMOND	2.09	1.46	1993
SAN JOSE	1.51	0.84	1995
SFO AIRPORT	1.49	0.86	1967
SANTA CRUZ	2.35	1.75	1929
SONOMA	2.37	2.28	1967
WOODSIDE	1.20	0.90	1992

OTHER NOTABLE JUNE PRECIPITATION RECORDS:

LOCATION.....	2011 RAIN.....	2011 RANK.....	WETTEST JUNE/AMOUNT
CALISTOGA	2.14	2ND WETTEST	1967/2.22
FORT ROSS	1.94	12TH	1906/3.90
HOLLISTER	0.35	2ND	2005/0.52
KENTFIELD	2.41	3RD	1967/3.42
KING CITY	0.54	4TH	1931/1.00
OCCIDENTAL	2.53	3RD	1967/3.58
SAINT HELENA	2.05	2ND	1929/2.37
SALINAS	0.34	7TH	1995/0.59
SAN FRANCISCO DNTWN	2.02	2ND	1884/2.57
SAN RAFAEL	0.74	7TH	1967/2.33
SANTA ROSA	1.62	4TH	1929/2.43
WATSONVILLE	1.11	3RD	1967/1.29

JUNE TEMPERATURES...

THE FIRST TWO WEEKS OF JUNE WERE COOL AS A PERSISTENT TROUGH REMAINED NEAR THE WEST COAST. A COUPLE OF BRIEF PERIODS OF WARM WEATHER OCCURRED AROUND THE MIDDLE OF THE MONTH...THE FIRST ON THE 14TH AND 15TH AND THEN AGAIN FROM THE 19TH THROUGH THE 21ST. THE WARMEST DAY OF THE MONTH FOR MANY LOCATIONS WAS ON TUESDAY THE 21ST...WHICH HAPPENED TO BE THE OFFICIAL START OF SUMMER. TEMPERATURES DROPPED SHARPLY THE VERY NEXT DAY AND THEN REMAINED BELOW NORMAL FOR THE REST OF THE MONTH.

JUNE 2011 WAS THE FIFTH CONSECUTIVE MONTH WITH BELOW NORMAL TEMPERATURES ACROSS OUR REGION. AVERAGE HIGH TEMPERATURES FOR THE MONTH WERE SIGNIFICANTLY BELOW NORMAL...MORE THAN 3 DEGREES

BELOW NORMAL IN MOST LOCATIONS TO AS MUCH AS 8 DEGREES BELOW NORMAL IN A FEW. MINIMUM TEMPERATURES WERE ALSO COOLER THAN THE 30-YEAR AVERAGE AT THE MAJORITY OF LOCATIONS...BUT ONLY BY A DEGREE OR TWO.

#### 2010-2011 RAIN YEAR SUMMARY...

THE 2010-2011 RAINFALL SEASON CAME TO AN END ON JUNE 30TH. PRECIPITATION FOR THE RAIN YEAR THAT BEGAN ON JULY 1 2010 WAS ABOVE NORMAL AT NEARLY ALL CLIMATE STATIONS ACROSS THE SAN FRANCISCO BAY AREA AND MONTEREY BAY AREA. THIS WAS THE SECOND CONSECUTIVE RAIN YEAR WITH ABOVE NORMAL PRECIPITATION.

THE RAIN YEAR GOT OFF TO A TYPICALLY DRY START WITH VERY LITTLE RAIN OCCURRING BETWEEN JULY 1 AND MID OCTOBER. HOWEVER...OCTOBER 2010 TURNED OUT TO BE A WET MONTH...PARTICULARLY ACROSS THE NORTHERN TWO-THIRDS OF OUR AREA. MOST OF OCTOBER'S PRECIPITATION OCCURRED BETWEEN THE 22ND AND THE 24TH...WHEN A WEATHER SYSTEM CONTAINING LARGE AMOUNTS OF MOISTURE FROM A WESTERN PACIFIC TYPHOON MOVED INTO NORTHERN AND CENTRAL CALIFORNIA.

AFTER NEAR NORMAL PRECIPITATION IN NOVEMBER...WET CONDITIONS RETURNED IN DECEMBER. ALTHOUGH OUR PART OF CALIFORNIA DID NOT RECEIVE RECORD AMOUNTS OF DECEMBER RAINFALL LIKE THE SOUTHERN PART OF THE STATE...RAIN TOTALS FOR THE MONTH WERE STILL QUITE IMPRESSIVE AND MORE THAN TWICE NORMAL AT MANY LOCATIONS. BY THE END OF THE CALENDAR YEAR...YEAR-TO-DATE RAINFALL TOTALS WERE ABOUT 110 TO 150 PERCENT OF NORMAL ACROSS THE REGION.

A PERSISTENT UPPER RIDGE DEVELOPED ALONG THE WEST COAST IN JANUARY AND RESULTED IN A VERY DRY MONTH. ALMOST NO PRECIPITATION OCCURRED BETWEEN A RAIN EVENT AT THE BEGINNING OF THE MONTH AND ANOTHER AT THE END. RAIN TOTALS FOR THE MONTH OF JANUARY WERE ABOUT ONE-THIRD OF NORMAL OR LESS. YEAR-TO-DATE RAIN TOTALS...WHICH HAD BEEN RESTING COMFORTABLY ABOVE NORMAL ON JANUARY 1...DROPPED BELOW NORMAL FOR MUCH OF THE AREA BY JANUARY 31.

THE DRY WEATHER PATTERN THAT BEGAN IN JANUARY CONTINUED THROUGH THE FIRST HALF OF FEBRUARY. AROUND VALENTINES DAY A SIGNIFICANT WEATHER PATTERN CHANGE OCCURRED WHICH RESULTED IN COOL AND WET WEATHER FOR THE SECOND HALF OF THE MONTH. FOR FEBRUARY AS A WHOLE...RAINFALL TOTALS WERE NEAR NORMAL.

MARCH 2011 WAS COOL...WET AND STORMY WITH ABOUT DOUBLE THE NORMAL PRECIPITATION. THE MOST INTENSE STORM OF THE RAIN YEAR MOVED ASHORE ON THE 24TH WHEN HEAVY RAIN AND STRONG WINDS OCCURRED. SEVERAL SMALL RIVERS AND STREAMS ACROSS THE REGION REACHED FLOOD STAGE THAT DAY. IN ADDITION...WIDESPREAD FLOOD DAMAGE OCCURRED IN THE CITY OF CAPITOLA ON THE 24TH WHEN A SURGING NOBLE GULCH CREEK OVERWHELMED A RUPTURED DRAIN PIPE AND SENT WATER FLOWING THROUGH THE STREETS. JUST TWO DAYS LATER...MORE LOCALLY HEAVY RAIN IN SANTA CRUZ COUNTY SENT WATER FLOWING THROUGH THE STREETS OF CAPITOLA ONCE AGAIN. BY THE END OF MARCH...YEAR-TO-DATE RAINFALL TOTALS HAD CLIMBED BACK TO NORMAL LEVELS IN THE SOUTH BAY TO AS MUCH AS 130 PERCENT OF

NORMAL IN THE NORTH BAY.

APRIL WAS A COOL AND DRY MONTH WITH RAIN TOTALS ONLY ABOUT 20 TO 40 PERCENT OF NORMAL. THE FIRST FEW WEEKS OF MAY WERE DRY AS WELL. BUT A PERIOD OF WET WEATHER AROUND THE MIDDLE OF MAY AND AGAIN AT THE END OF MAY PUSHED MAY RAINFALL TOTALS FOR THE MONTH WELL ABOVE NORMAL. BY THE END OF MAY NEARLY ALL CLIMATE LOCATIONS WERE GUARANTEED ABOVE NORMAL RAINFALL FOR THE RAIN YEAR. SAN JOSE WAS ONE OF THE FEW EXCEPTIONS. BUT JUNE'S RECORD SETTING RAINFALL PUSHED EVEN SAN JOSE ABOVE NORMAL FOR THE YEAR AS A WHOLE.

BELOW IS A LISTING OF 2010-2011 RAIN YEAR PRECIPITATION TOTALS...  
NORMAL YEARLY RAINFALL...AND PERCENT OF NORMAL. NORMAL RAINFALL IS  
BASED ON THE 1971-2000 30-YEAR AVERAGE.

LOCATION	2010-2011 TOTAL RAIN	JUL 1- JUNE 30 NORMAL	PERCENT OF NORMAL
NORTH BAY...			
KENTFIELD	53.10	47.47	112
NAPA	34.99	26.46	132
OCCIDENTAL	68.36	55.87	122
SAINT HELENA	47.87	34.88	137
SAN RAFAEL	35.54	34.29	104
SANTA ROSA AIRPORT	41.31	31.91	129
SAN FRANCISCO PENINSULA...			
HALF MOON BAY	27.75	27.96	99
SAN FRANCISCO AIRPORT	22.98	20.11	114
SAN FRANCISCO DOWNTOWN	28.87	22.30	129
EAST BAY...			
CONCORD	22.51	15.72	143
LIVERMORE	16.21	14.82	109
MARTINEZ	25.45	19.58	130
MOUNT DIABLO JUNCTION	33.55	23.96	140
OAKLAND MUSEUM	31.61	22.94	138
OAKLAND AIRPORT	23.03	17.42	132
SOUTH BAY AND SANTA CRUZ COUNTY...			
BEN LOMOND	61.97	47.68	130
MOUNT HAMILTON	33.71	23.73	142
MOFFETT FIELD	14.95	13.35	112
SAN JOSE	15.61	15.08	104
SANTA CRUZ	39.98	30.67	130
MONTEREY AND SAN BENITO COUNTIES...			
BIG SUR	43.39	43.20	100
CARMEL VALLEY	19.97	17.17	116
HOLLISTER	14.55	13.61	107
KING CITY	15.32	12.30	125
MONTEREY	24.60	20.35	121
SALINAS AIRPORT	15.59	12.91	121

...JUNE REGIONAL TEMPERATURE SUMMARY...

LOCATION	AVG HIGH	NORMAL HIGH	DEPARTURE		AVG LOW	NORMAL LOW	DEPARTURE	
			FROM NORMAL				FROM NORMAL	
NORTH BAY...								
CLOVERDALE	83.7	87.0	-3.3		53.2	54.4	-1.2	
KENTFIELD	73.7	81.8	-8.1		50.3	50.9	-0.6	
SAN RAFAEL	72.4	77.8	-5.4		52.2	53.0	-0.8	
SAN FRANCISCO PENINSULA...								
PACIFICA	60.6	69.0	-8.4		49.8	50.7	-0.9	
REDWOOD CITY	75.9	80.2	-4.3		52.3	52.6	-0.3	
SAN FRANCISCO AIRPORT	68.1	69.9	-1.8		52.9	52.9	0.0	
SAN FRANCISCO DOWNTOWN	64.6	67.7	-3.1		52.7	53.2	-0.5	
EAST BAY...								
CONCORD	78.8	83.5	-4.7		55.3	56.6	-1.3	
FREMONT	73.0	76.6	-3.6		53.6	54.8	-1.2	
LIVERMORE	80.8	84.1	-3.3		52.4	52.5	-0.1	
MOUNT DIABLO JUNCTION	71.1	78.5	-7.4		53.0	53.0	0.0	
OAKLAND	69.5	71.5	-2.0		54.4	55.7	-1.3	
SOUTH BAY AND SANTA CRUZ COUNTY...								
BEN LOMOND	74.7	81.9	-7.2		48.2	48.2	0.0	
SAN JOSE	76.2	80.1	-3.9		54.7	55.3	-0.6	
SANTA CRUZ	69.2	73.9	-4.7		50.9	50.4	0.5	
WATSONVILLE	66.7	71.0	-4.3		52.6	51.0	1.6	
MONTEREY AND SAN BENITO COUNTIES...								
CARMEL VALLEY	69.9	74.5	-4.6		M	49.2		M
HOLLISTER	73.4	78.0	-4.6		M	50.4		M
KING CITY	78.2	82.5	-4.3		50.8	49.3	1.5	
MONTEREY	61.8	67.1	-5.3		50.1	50.4	-0.3	
SALINAS	65.8	70.6	-4.8		51.0	51.9	-0.9	

...JUNE REGIONAL PRECIPITATION SUMMARY...

LOCATION	JUNE TOTAL	AVERAGE JUNE PRECIP		PERCENT OF NORMAL

NORTH BAY...

CALISTOGA	2.14	0.22	973
CLOVERDALE	2.27	0.12	1892
FORT ROSS	1.94	0.35	554
KENTFIELD	2.41	0.24	1004
MUIR WOODS	3.32	0.34	976
NAPA	2.61	0.16	1631
OCCIDENTAL	2.53	0.34	744
SAINT HELENA	2.44	0.19	1284
SAN RAFAEL	0.74	0.13	569
SANTA ROSA	1.62	0.19	853
SONOMA	2.37	0.19	1247

SAN FRANCISCO PENINSULA...

HALF MOON BAY	2.11	0.26	812
REDWOOD CITY	1.04	0.10	1040
PACIFICA	2.20	0.29	759
SAN FRANCISCO			
AIRPORT	1.49	0.11	1355
SAN FRANCISCO			
DOWNTOWN	2.02	0.13	1544
WOODSIDE	1.20	0.14	857

EAST BAY...

CONCORD	2.21	0.11	2009
FREMONT	1.85	0.07	2643
LIVERMORE	1.07	0.09	1189
MARTINEZ	2.52	0.12	2100
MOUNT DIABLO			
JUNCTION	3.71	0.15	2473
OAKLAND	2.70	0.12	2250
RICHMOND	2.09	0.17	1229

SOUTH BAY AND SANTA CRUZ COUNTY...

BEN LOMOND	3.25	0.22	1477
MOUNT HAMILTON	1.52	0.24	633
SAN JOSE	1.51	0.10	1510
SANTA CRUZ	2.35	0.11	2136
WATSONVILLE	1.11	0.12	925

MONTEREY AND SAN BENITO COUNTIES...

BIG SUR STATION	3.63	0.27	1344
CARMEL VALLEY	0.73	0.10	730
HOLLISTER	0.35	0.08	438
KING CITY	0.54	0.07	771
MONTEREY	1.56	0.20	780
SALINAS	0.34	0.09	378

...DAILY TEMPERATURE RECORDS FOR JUNE 2011...

		RECORD MINIMUM TEMP	PREVIOUS RECORD
6/14	OAKLAND AIRPORT	50	50 IN 2006

...MONTHLY RANKS FOR DOWNTOWN SAN FRANCISCO...

AVERAGE HIGH TEMPERATURE....64.6....40TH COOLEST OUT OF 136 YEARS  
 AVERAGE LOW TEMPERATURE.....52.7.....63RD COOLEST OUT OF 136 YEARS  
 PRECIPITATION.....2.02 INCHES.....2ND WETTEST OUT OF 161 YEARS

...MONTHLY EXTREMES FOR SELECT LOCATIONS...

LOCATION	WARMEST DAY(S)	COOLEST DAY(S)	WETTEST DAY(S)
SANTA ROSA AIRPORT	6/21 96 DEG	6/05 45 DEG	6/28 0.63 IN
SAN FRANCISCO	6/20 88 DEG	MULT DAYS 50 DEG	6/04 0.99 IN
SAN JOSE	6/20 6/21 96 DEG	6/02 46 DEG	6/04 0.88 IN
SALINAS AIRPORT	6/21 85 DEG	6/03 46 DEG	6/28 0.14 IN

NOTE: THIS CLIMATOLOGICAL DATA IS PRELIMINARY. FOR OFFICIAL  
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